

***Tetradesmus lagerheimii* var. *tetradesmoides***

**(Smith) Taşkin & Alp 2019**

**Most likely ID:** n.a.

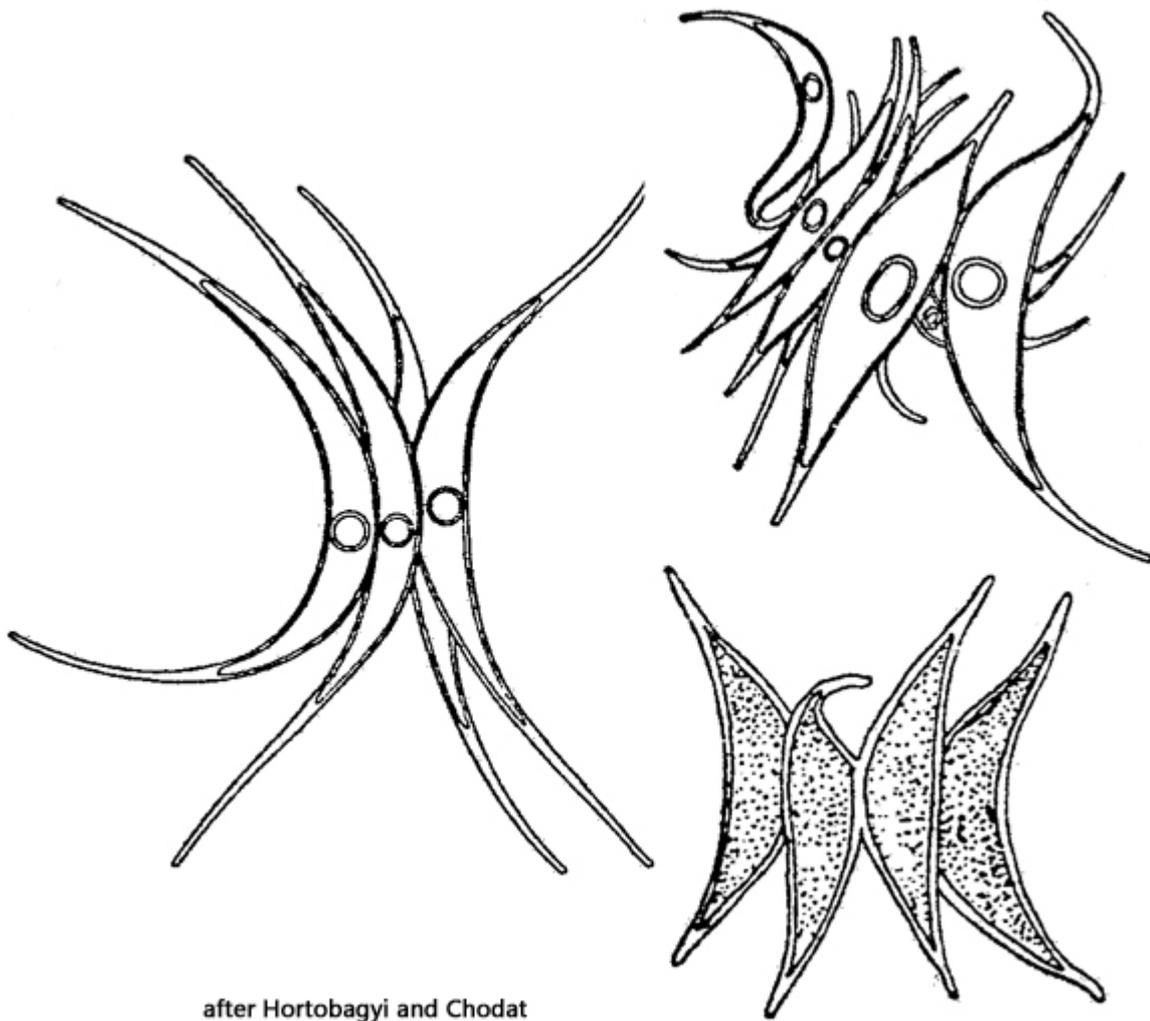
**Synonym:** *Scenedesmus acuminatus* var. *tetradesmoides*

**Sampling location:** [Pond of the waste disposal company Constance](#)

**Phylogenetic tree:** [Tetradesmus lagerheimii var. tetradesmoides](#)

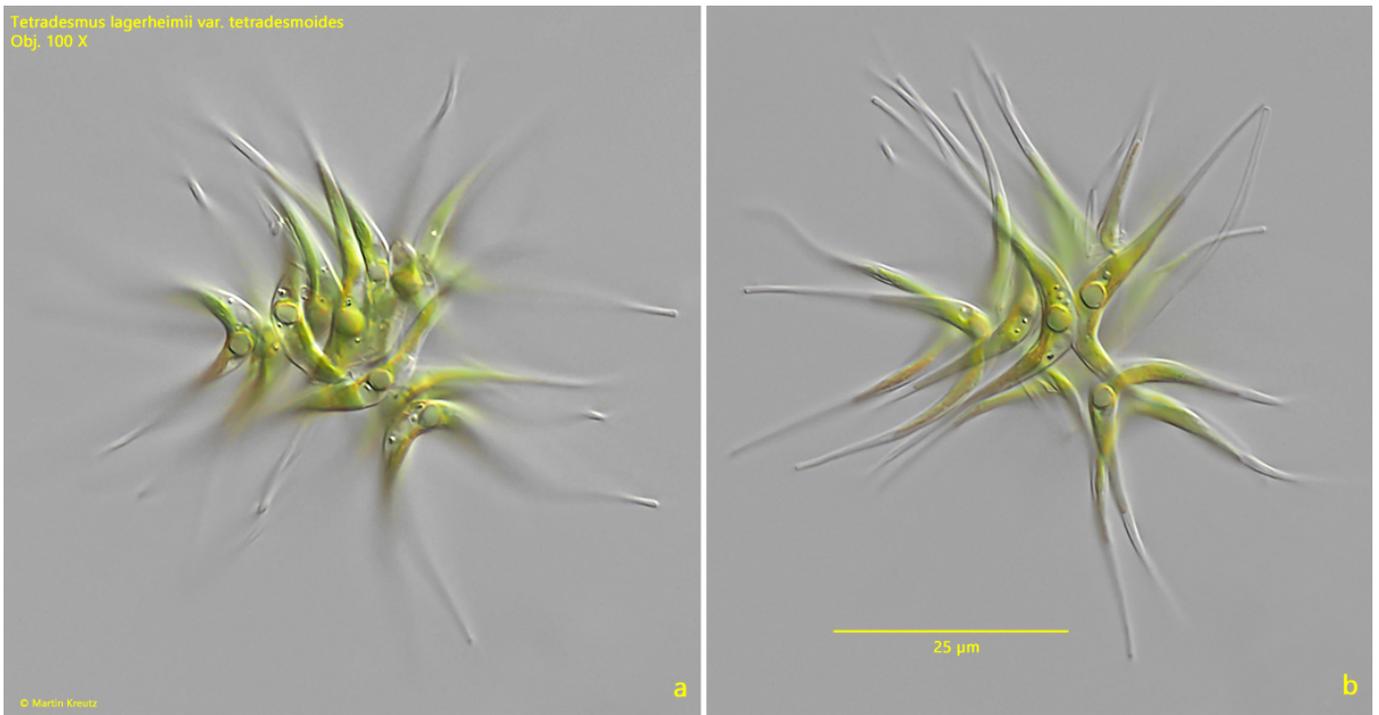
**Diagnosis:**

- irregular coenobia of 2–8 cells
- cells 9.6–23 µm long, width 2–3 µm
- cells touch each other with convex sides
- inner cells asymmetrical spindle-shaped with gradually tapered and rounded ends
- tapered “arms” of the cells sometimes S-shaped
- tapered ends of the cells are hyaline
- cell surfaces smooth
- one pyrenoid per cell
- planktonic lifestyle

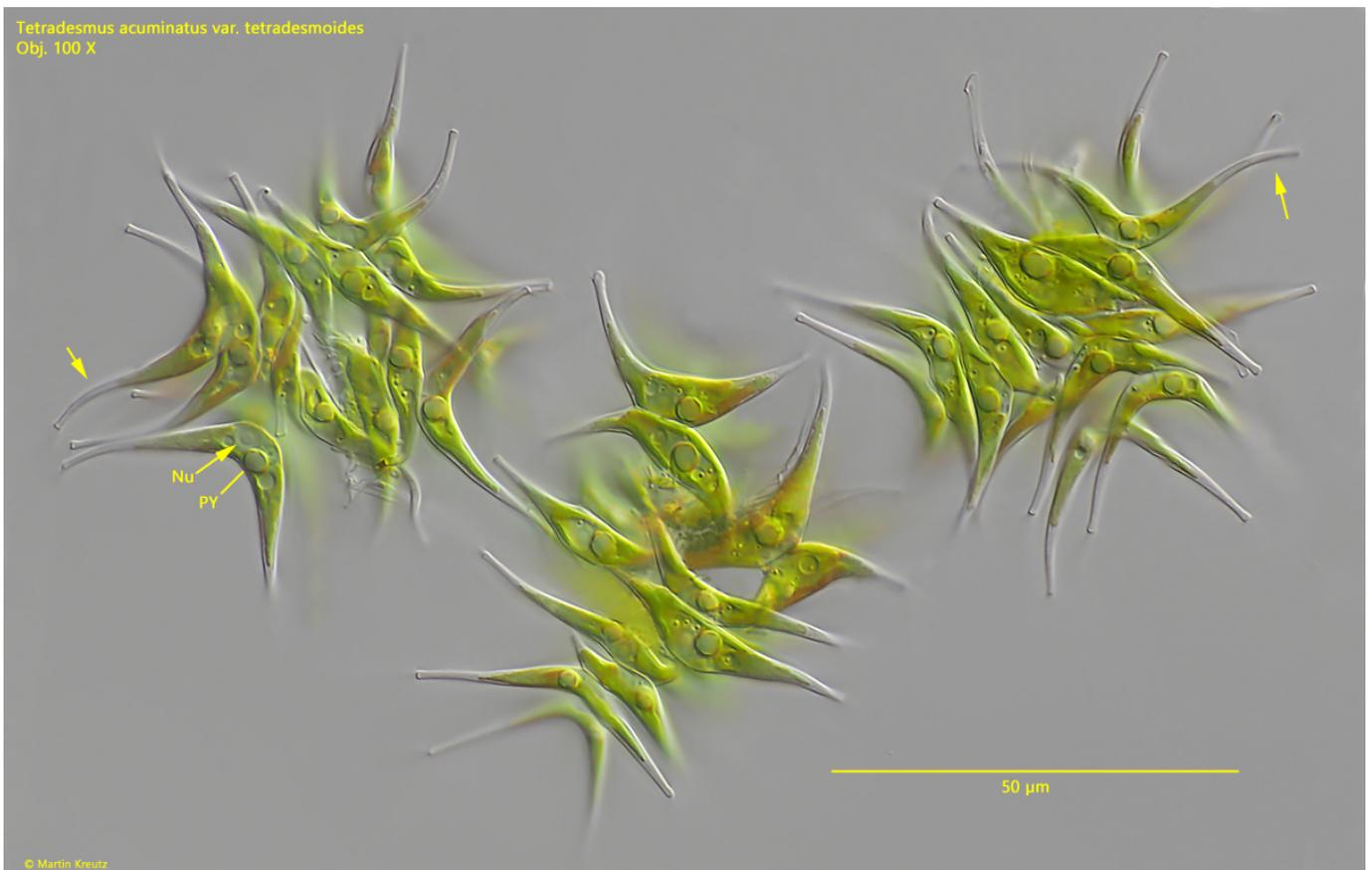


*Tetradesmus lagerheimii* var. *tetradesmoides*

I found *Tetradesmus lagerheimii* var. *tetradesmoides* in September 2022 in the plankton of the pond of the waste disposal company Constance. The species was present in large numbers in the samples. All coenobia were clustered in irregular aggregates, which were possibly united in a common gelatinous sheath. However, I could not recognize any gelatinous sheath in DIC. These aggregates had an average diameter of 50  $\mu\text{m}$ . Characteristic for *Tetradesmus lagerheimii* var. *tetradesmoides* are the irregular coenobia, which can consist of cells of different sizes, which are sometimes arranged twisted against each other. The tapered ends of the cells are long and in some cells bent in a S-shape.



**Fig. 1 a-b:** *Tetradesmus lagerheimii* var. *tetradesmoides*.  $D = \sim 50 \mu\text{m}$  (of pseudocolony). Two focal planes of a agglomerate of several coenobia in a pseudocolony. Obj. 100 X.



**Fig. 2:** *Tetradesmus lagerheimii* var. *tetradesmoides*. Three slightly squashed pseudocolonies. Note the backward bent “arms” (arrows), what gives them a slight

S-shape. Nu = nucleus, PY = pyrenoid. Obj. 100 X.